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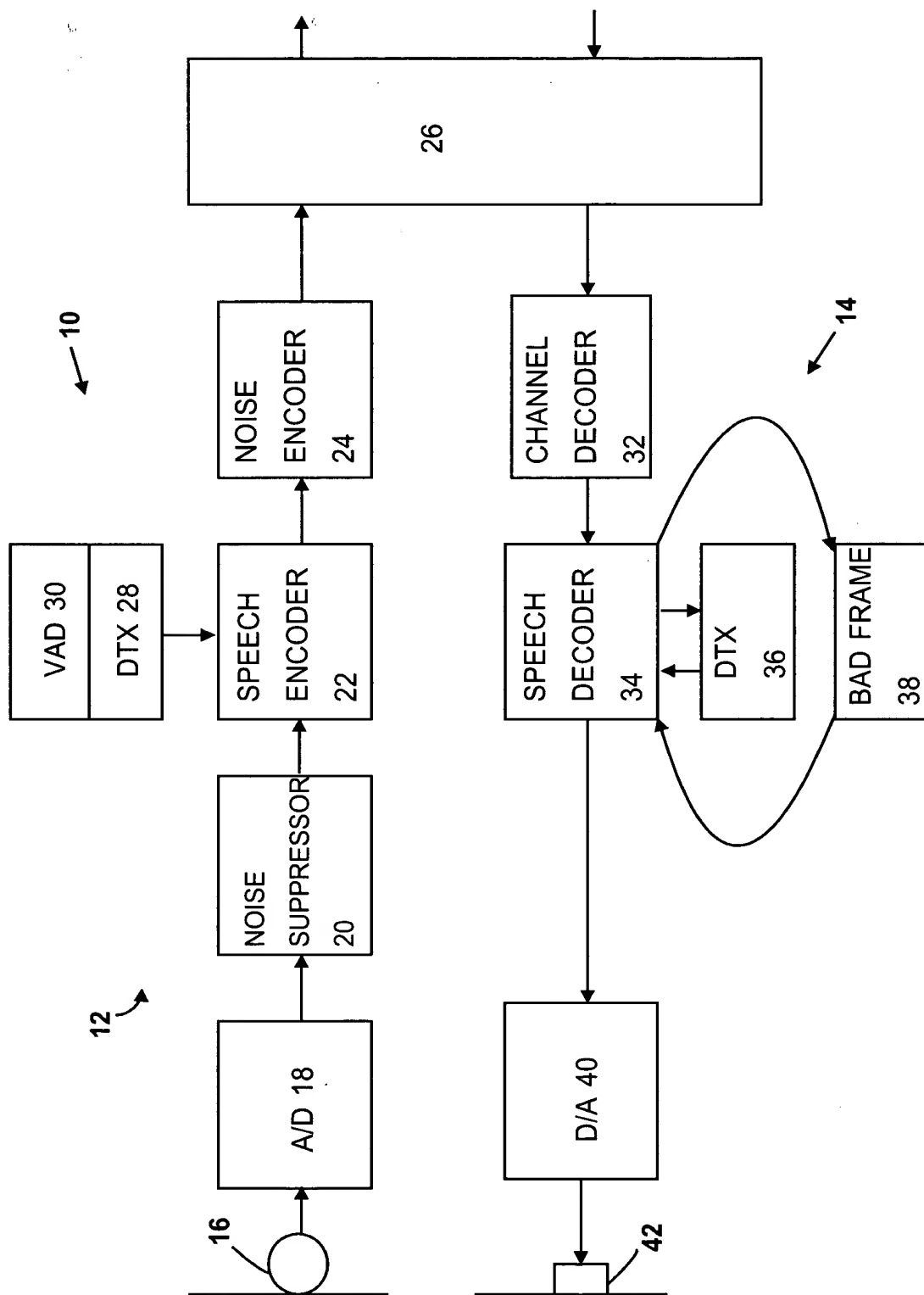


Fig. 1

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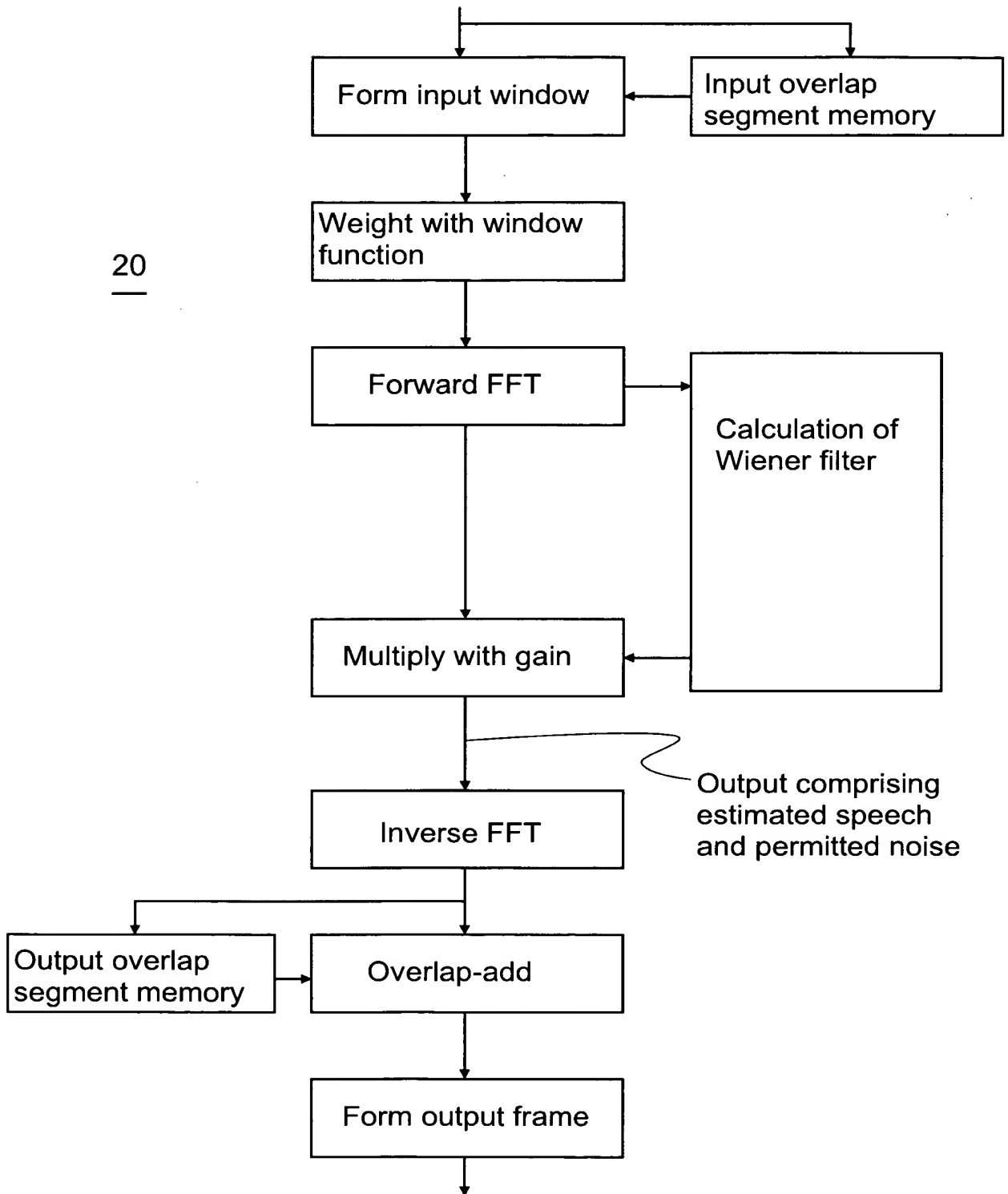


Fig. 2

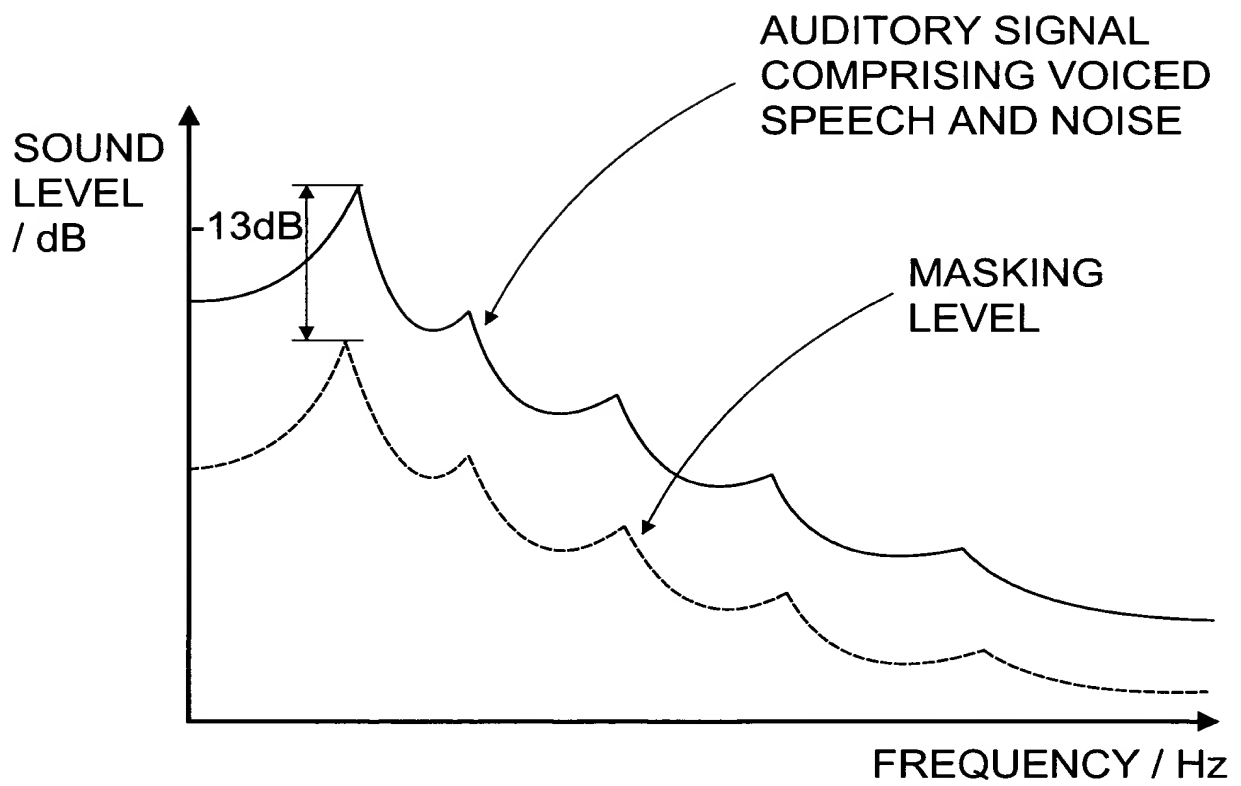


Fig. 3

Transform the time domain noisy speech signal input to frequency domain

STEP 1

- Estimate a first speech periodogram
- set the mask at - 13dB of the speech power
- estimate the noise periodogram
- compute the speech+masked noise periodogram
- update the number of block for time averaging
- calculate the forgetting factor for noise psd updating

STEP 2      calculate the input power  
(speech periodogram + noise psd)

STEP 3      Compute the Wiener filter

STEP 4      update the noise psd

STEP 5

- Estimate the signal-to-noise ratio
- compute the Higher order Wiener filter
- estimate the current speech periodogram

STEP 6

- determine the amplification level at each band
- amplify the Wiener filter

STEP 7      Choose a value for the noise reduction  
level at the output

STEP 8      compute the final Wiener filter and multiply it with  
the input to produce the output estimate

Transform the frequency domain estimated output to time domain

Fig. 4

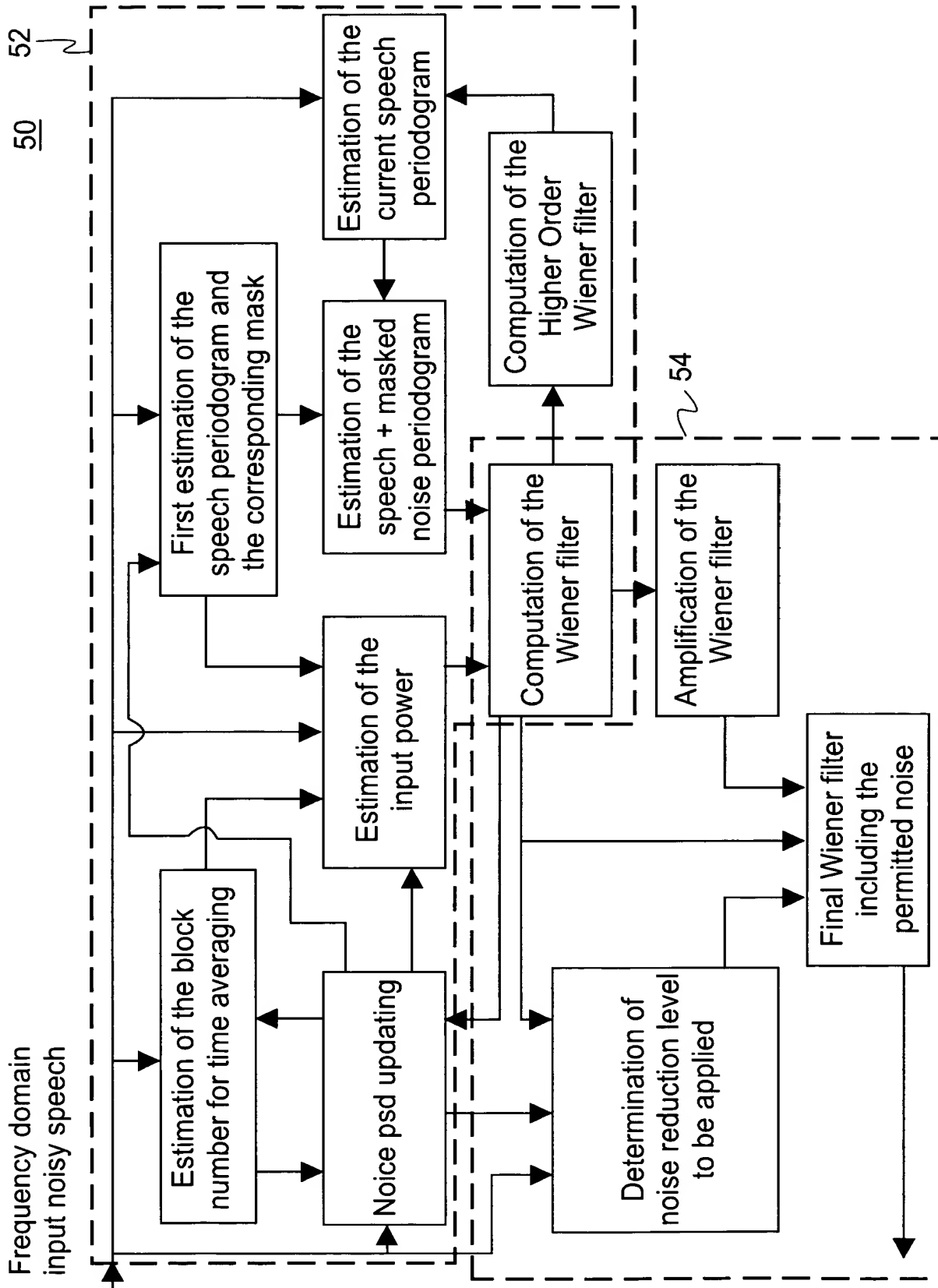


Fig. 5